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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------|------------------|
| 10/680,831 | 10/07/2003 | Kristina Vogt | Mo-6646D/LeA 34,283D | 5388 |
| 34947 | 7590 | 07/20/2005 | EXAMINER | |
| LANXESS CORPORATION 111 RIDC PARK WEST DRIVE PITTSBURGH, PA 15275-1112 | | | MARCHESCHI, MICHAEL A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1755 | |
| DATE MAILED: 07/20/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/680,831

Applicant(s)

VOGT ET AL.

Examiner

Michael A. Marcheschi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE filed 5/16/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/023,174.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/16/05 has been entered.

The disclosure is objected to because of the following informalities:

The specification is objected to because on page 1, the continuing data does not define the status of the parent application (i.e. abandoned). The continuing data must be amended to properly define the current status of the parent application.

Appropriate correction is required.

Claims 10-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The new matter is the limitation "wherein the slurry has a pH ranging from about 2 to about 6" as defined in part (c) of independent claim 10 because the specification only provides

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support for this pH at a temperature of 22°C. Since no temperature is defined for the pH as claimed, it is broader in scope than the original disclosure

Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over either (1) EP 1077241 A2 or (2) Misra et al. for the same reasons set forth in the previous office action which are incorporated herein by reference.

Claim 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/78116 in view of Mirsa et al. and Ina et al. for the same reasons set forth in the previous office action which are incorporated herein by reference.

Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grover et al. alone or in view of Mirsa et al. and Ina et al. for the same reasons set forth in the previous office action which are incorporated herein by reference.

Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Francis et al. in view of Mirsa et al. for the same reasons set forth in the previous office action which are incorporated herein by reference.

Applicant's arguments filed 5/16/05 have been fully considered but they are not persuasive.

Applicants argue that the pH limitation is not new matter because the examples contain different pH values and the language on page 5, lines 9-12 is a preferred limitation. The examiner acknowledges this but **no where** in the specification is support for the claimed pH range about 2 to about 6 **without** any temperature range associated with it. The specification **only** supports the claimed pH range at **22°C**. As for the examples, how do these support a pH

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range of about 2 to about 6? In addition, assuming further *arguendo* about the preferred range, the preferred range is a pH of about 2 to about 6 but the specification does **not** define that this is preferred at a pH of 22°C. In view of this, how is the temperature limitation as preferred embodiment?

Applicants argue that EP 1077241 A2 and Misra et al. do not teach the claimed invention because one of ordinary skill in the art would not have been motivated to select the claimed pH values. The examiners previous position was that since the references fail to mention any **general** specific pH (criticality), this (the absence of any such limitation) constitutes a broad teaching of pH values, thus making the claimed pH (acidic) obvious. In view of this, it can be reasonably interpreted that the claimed pH is encompassed by the broad teachings according to these references in the absence of any evidence showing the contrary (criticality). This is apparent because all slurries must have a pH. The motivation is that the references suggest a broad pH range and applicants have **not** shown any evidence showing critically for the claimed pH range. The examiner acknowledges that the references teach that the pH is **preferably** greater than 7 but as is well known “A reference can be used for all it realistically teaches and **is not limited to the disclosure in its preferred embodiments**” See *In re Van Marter*, 144 USPQ 421. Absent the preferred embodiments, the references clearly suggest any pH values. In addition, the claims of the references fails to mention any pH value so how can the reference claims be limited to only the preferred pH values? In addition, the pH is dependent on the substrate to be polished and it is the examiners position that since the references teach an etching agent, the pH of the composition is a pH effective to etch the substrate. Since the substrate to be polished is the same and the composition is the same, it is the examiners position

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that the pH needed to etch the substrate can be the same and applicants have not provided any comparative evidence showing that the references composition can not have the claimed pH. In the alternative and assuming any further arguendo, the claimed pH is modified by the term "about" and as is well known "about" **permits some tolerance**, *In re Ayers*, 154 F 2d 182, 69 USPQ 109, thus about 6 broadly reads on greater than 7 (i.e. 7.01). Finally, to comment on the unexpected advantages in examples 1-4, the results defined therein are **insufficient** to establish criticality or unexpected results because the evidence is not commensurate in scope with the claims. The examples use specific concentrations, have a specific pH and use a **specific fluoride**, thus how can these examples provide criticality for the broad claimed values? Although one can extrapolate the data, extrapolation to meet the claimed ranges would not be apparent. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356. **To establish unexpected results over a claimed range**, applicants should compare a sufficient number of tests both inside and outside (i.e. as well as the upper and lower limits) the claimed range to show the criticality of the claimed range. **In re Hill 284 F.2d 955, 128 USPQ 197 (CCPA 1960)**. Applicants have not compared the claimed invention to that of the reference.

With respect to the rejection based on WO 01/78116 in view of Mirsa et al. and Ina et al., applicants argue the examples of the WO reference but, as is well known **"a reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments (i.e. examples)"** See *In re Van Marter*, 144 USPQ 421. With respect to the combination, applicants have not argued the examiners reasons for combining the references. A

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mere statement that “the references do not contain some suggestion or incentive to modify the reference” is not a proper response to a combination rejection absent evidence to support this.

With respect to the rejection based on Grover et al. alone or in view of Mirsa et al. and Ina et al. applicants have not argued the examiners reasons for combining the references. A mere statement that “the references do not contain some suggestion or incentive to modify the reference” is not a proper response to a combination rejection absent evidence to support this.

With respect to the rejection based on Francis in view of Mirsa et al., applicants argue that Francis does not disclose the claimed invention. The examiner disagrees because Francis teach a method comprising polishing a substrate containing silicon oxide and silicon nitride with a polishing slurry that comprises silica and a fluoride salt (all in the claimed amounts), wheein the slurry has a pH of about 7 and “about” permits some tolerance (see above). With respect to the colloidal silica limitation, applicants have not argued the obviousness of this limitation as defined in the previous office action.

In view of the teachings as set forth above, it is still the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114.

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See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968). In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.

A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971).

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Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548.

Evidence of unexpected results must be commensurate in scope with the subject matter claimed.

In re Linder 173 USPQ 356.

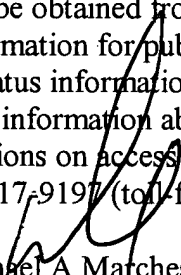
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7/05

MM


Michael A Marcheschi
Primary Examiner
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